REMARKS

Introduction

Upon entry of the foregoing amendment, claims 1, 3, 4, 6-10, 13, 16-19, 22, 25-30, 32, 34-36, 39, 42-45, 51-55 and 57 are pending in the application. Claims 1, 16, 25, 26, and 51 have been amended. Claims 2, 5, 11, 12, 14, 15, 20, 21, 23, 24, 31, 33, 37, 38, 40, 41, 46, 47, 49, 50, and 56 have been canceled without prejudice or disclaimer. No new matter is being presented. In view of the following remarks, reconsideration and allowance of all the pending claims are requested.

Objections

The Examiner has objected to the specification under 35 U.S.C. §1.32(a). Applicants have amended paragraph [0094] such that it is the same as originally filed in order to address the Examiner's concerns and to expedite prosecution of the above-identified patent application.

Reconsideration of the specification and withdrawal of this objection are earnestly solicited.

Rejection under 35 USC §101

Claims 25 and 26 have been rejected under 35 U.S.C. §101. Reconsideration of these claims in view of the following remarks is earnestly solicited.

With regard to independent claim 25, Applicants have amended this claim, to recite, among other things, a "computer-readable medium having computer-readable codes recorded thereon that, when executed by a computer, perform a method of splitting an image block." Applicants respectfully submit that as described, for example, in paragraph [0094] of Applicants' specification, the "computer readable medium" having "computer-readable codes recorded thereon" that are "executed by a computer" include such media as "ROM, "floppy disk," and "CD-ROM." As carrier waves are used in transmission of codes, and are not "recorded" on a "computer readable medium," Applicants respectfully submit that claim 25, as presently recited

is directed to statutory subject matter.

With regard to independent claim 26, Applicants have amended this claim, to recite, among other things, a "computer-readable medium having computer-readable codes recorded thereon, that, when executed by a computer, perform a method of splitting an image block." Applicants respectfully submit that as described, for example, in paragraph [0094] of Applicants' specification, the "computer readable medium" having "computer-readable codes recorded thereon" that are "executed by a computer" include such media as "ROM, "floppy disk," and "CD-ROM." As carrier waves are used in transmission of codes, and are not "recorded" on a "computer readable medium," Applicants respectfully submit that claim 26, as presently recited is directed to statutory subject matter.

Reconsideration of these claims and withdrawal of these rejections are earnestly solicited.

Rejection under 35 USC §101

Claims 1, 3, 4, 6-10, 13, 16-19, 22, 51 and 57 have been rejected under 35 U.S.C. §101. Applicants have amended independent claims 1, 16, and 51 in order to address the Examiner's concerns and expedite prosecution of the above-identified patent application. As presently recited, independent claims 1, 16, and 51 fall into at least "one of the four statutory categories of invention." As claims 3, 4, 6-10, 13, 17-19, 22 and 57 depend from independent claims 1, 16, and 51, respectively, and therefore contain each of the features as recited in claims 1, 16, and 51, respectively, claims 3, 4, 6-10, 13, 17-19, 22 and 57 fall into at least "one of the four statutory categories of invention."

Reconsideration of these claims and withdrawal of these rejections are earnestly solicited.

Rejection under 35 USC §103

Claims 1, 3, 10, 13, 16, 19, 22, 25-29, 36, 39, 42, 45, 48, 51, 52 and 57 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of "*Robust*

quadtree-based disparity estimation...", SPIE article to Mancini et al. (hereinafter, "Mancini"), U.S. Patent No. 6,529,634 to Thyagarajan et al. (hereinafter, "Thyagarajan") and U.S. Patent No. 5,923,376 to Pullen et al. (hereinafter, "Pullen"). Applicants respectfully traverse these rejections for at least the following reasons.

Claim 1

On page 7 of the Office Action, the Examiner acknowledges and Applicants agree that the "Mancini et al. and Thyagarajan et al. combination does not disclose determining whether a macro block at a same location in a preceding image frame has been split." The Examiner contends that Pullen describes

> determining whether to split the block by determining whether a block at a same location in a preceding image frame has been split ("find a block in previous buffer 30, a search corresponds to a block in current frame buffer 16" at col. 12, line 14; "process for level 1 begins by segmenting the level 0 domain in to a plurality of level 1 domain child blocks" at col. 18, line 4; "If the estimated cost is less than the distortion measurement, a level 1 range area is defined in the previous frame buffer for one of the domain child blocks and each range child block within that range is compared to the domain child block" at col. 18, line 30).

Applicants respectfully submit that Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another, fail to teach or suggest, among other things,

> setting a plurality of splitting threshold values with a macro block splitting determining unit to compare with a characteristic of a macro block in an image frame and determining thereby whether to split the macro block into sub blocks with the macro block splitting determining unit by determining whether the macro block at a same location in a preceding image frame has been split

as presently recited in claim 1. In contrast, Pullen describes at col. 12, lines 14-16 that "[t]o find a block in previous frame buffer 30 which corresponds to a block in current frame buffer 16, a search must be performed" -- not "determining thereby whether to split the macro block into sub blocks" by "determining whether the macro block at a same location in a preceding image frame has been split." In other words, performing a "search" to "find a block in the previous frame buffer" that "corresponds" with a block in the "current frame buffer" is entirely different from "***determining*** ... whether to split the macro block into sub blocks" *by* "***determining*** whether the macro block at a same location in a preceding image frame has been split" (emphasis added).

Pullen illustrates in FIG. 9 and describes in col. 18, lines 3-6 a "level 1" block search process for the "Y component" begins by "segmenting the level 0 domain block into a plurality of level 1 child domain blocks." Pullen describes at col. 18, lines 25-34 "determining whether a level 1 search is to be performed" by "comparing an estimated level 1 cost for a level 1 block to the distortion measurement for the level 0 block attributable to the level 1 block." Pullen describes that "[i]f the estimated cost is less than the distortion measurement, a level 1 range area is defined in the previous frame buffer for one of the domain child blocks" and "each range child block within that range area is compared to the domain child block." In other words, Pullen describes "segmenting the level 0 domain block into a plurality of level 1 child domain blocks," and "determining whether a level 1 search is to be performed" by "comparing an estimated level 1 cost for a level 1 block" to the "distortion measurement" for the "level 0 block attributable to the level 1 block" -- not "***determining*** thereby ***whether to split*** the macro block into sub blocks" *by* "*determining* whether the macro block at a same location in a preceding image frame has been split" (emphasis added).

Since Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another, fail to teach or suggest each of the features as recited in Applicants' claim 1, claim 1 is patentably distinguishable and deemed to be allowable.

Accordingly, withdrawal of this rejection and allowance of this claim are earnestly solicited.

Claims 3, 10, and 13

With regard to claims 3, 10, and 13, it is requested that for at least the reasons that these claims depend from allowable independent claim 1, and therefore contain each of the features as recited in claim 1, claims 3, 10, and 13 are also patentable over Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another.

Accordingly, withdrawal of these rejections and allowance of these claims are earnestly solicited.

Claim 16

On page 10 of the Office Action, the Examiner acknowledges and Applicants agree that the "Mancini et al. and Thyagarajan et al. combination does not disclose determining whether a macro block at a same location in a preceding image frame has been split" and "determining whether a sub block at a same location in a preceeding image frame has been split." The Examiner contends that Pullen describes

> determining whether to split the macro block by determining whether a macro block at a same location in a preceding image frame has been split ("find a block in previous buffer 30, a search corresponds to a block in current frame buffer 16" at col. 12, line 14; "process for level 1 begins by segmenting the level 0 domain in to a plurality of level 1 domain child blocks" at col. 18, line 4; "If the estimated cost is less than the distortion measurement, a level 1 range area is defined in the previous frame buffer for one of the domain child blocks and each range child block within that range is compared to the domain child block" at col. 18, line 30).

Applicants respectfully submit that Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another, fail to teach or suggest, among other things, "determining whether to split the macro block by determining whether a macro block at a same location in a preceding image frame has been split with a macro block splitting determining unit" as presently recited in claim 16 for at least the same reasons as discussed above in connection with claim 1.

Applicants respectfully submit that Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another, fail to teach or suggest, among other things,

> setting a plurality of sub block splitting threshold values for splitting the sub block into smaller sub blocks and determining whether to split the sub block into smaller sub blocks by determining whether a sub block at a same location in the preceding image frame has been split with a sub block splitting determining unit

as presently recited in claim 16. In contrast, In contrast, Pullen describes at col. 12, lines 14-16 that "[t]o find a block in previous frame buffer 30 which corresponds to a block in current frame buffer 16, a search must be performed" -- not "determining whether to split the sub block into smaller sub blocks" by "determining whether a sub block at a same location in the preceding image frame has been split with a sub block splitting determining unit." In other words, performing a "search" to "find a block in the previous frame buffer" that "corresponds" with a block in the "current frame buffer" is entirely different from "determining whether to split the sub

block into smaller sub blocks" by "determining whether a sub block at a same location in the preceding image frame has been split with a sub block splitting determining unit."

Pullen illustrates in FIG. 9 and describes in col. 18, lines 3-6 a "level 1" block search process for the "Y component" begins by "segmenting the level 0 domain block into a plurality of level 1 child domain blocks." Pullen describes at col. 18, lines 25-34 "determining whether a level 1 search is to be performed" by "comparing an estimated level 1 cost for a level 1 block to the distortion measurement for the level 0 block attributable to the level 1 block." Pullen describes that "[i]f the estimated cost is less than the distortion measurement, a level 1 range area is defined in the previous frame buffer for one of the domain child blocks" and "each range child block within that range area is compared to the domain child block." In other words, Pullen describes "segmenting the level 0 domain block into a plurality of level 1 child domain blocks," and "determining whether a level 1 search is to be performed" by "comparing an estimated level 1 cost for a level 1 block" to the "distortion measurement" for the "level 0 block attributable to the level 1 block" -- not "determining whether to split the sub block into smaller sub blocks" by "determining whether a sub block at a same location in the preceding image frame has been split with a sub block splitting determining unit."

Since Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another, fail to teach or suggest each of the features as recited in Applicants' claim 16, claim 16 is patentably distinguishable and deemed to be allowable.

Accordingly, withdrawal of this rejection and allowance of this claim are earnestly solicited.

Claims 19 and 22

With regard to claims 19 and 22, it is requested that for at least the reasons that these claims depend from allowable independent claim 16, and therefore contain each of the features as recited in claim 16, claims 19 and 22 are also patentable over Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another.

Accordingly, withdrawal of these rejections and allowance of these claims are earnestly solicited.

Claims 25 and 52

With regard to independent claim 25, the Examiner contends that the

> Mancini et al., Thyagarajan et al. and Pullen et al. combination discloses a computer-readable medium having computer readable-codes that, when executed (it is inherent that the method is written on a computer-readable medium to enable the method to [be] performed), perform the method as described by claim 1 above (see claim 1 rejection).

Applicants respectfully submit that Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another, fail to teach or suggest, among other things,

> setting a plurality of splitting threshold values to compare with a characteristic of a macro block in an image frame and determining thereby whether to split the macro block into sub blocks by determining whether the macro block at a same location in a preceding image frame has been split

for at least the same reasons as discussed above in connection with claim 1.

Since Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another, fail to teach or suggest each of the features as recited in Applicants' claim 25, claim 25 is patentably distinguishable and deemed to be allowable.

With regard to claim 52, it is requested that for at least the reason that this claim depends from allowable independent claim 25, and therefore contains each of the features as recited in claim 25, claim 52 is also patentable over Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another.

Accordingly, withdrawal of these rejections and allowance of these claims are earnestly solicited.

Claim 26

On page 11 of the Office Action, the Examiner contends that

> Mancini et al., Thyagarajan et al. and Pullen et al. combination discloses a computer-readable medium having computer readable-codes that, when executed (it is inherent that the method is written on a computer-readable medium to enable the method to [be] performed), perform the method as described by claim 16 above (see claim 16 rejection).

Applicants respectfully submit that Mancini, Thyagarajan, and Pullen, whether taken

alone or in combination with one another, fail to teach or suggest, among other things, "setting a plurality of macro block splitting threshold values for splitting a macro block in an image frame into sub blocks and determining whether to split the macro block by determining whether the macro block at a same location in a preceding image frame has been split" for at least the same reasons as discussed above in connection with claim 16.

Applicants respectfully submit that Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another, fail to teach or suggest, among other things, "setting a plurality of sub block splitting threshold values for splitting the sub block into smaller sub blocks and determining whether to split the sub block into smaller sub blocks by determining whether the sub block at a same location in the preceding image frame has been split" for at least the same reasons as discussed above in connection with claim 16.

Since Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another, fail to teach or suggest each of the features as recited in Applicants' claim 26, claim 26 is patentably distinguishable and deemed to be allowable.

Accordingly, withdrawal of this rejection and allowance of this claim are earnestly solicited.

Claim 27

On page 13 of the Office Action, the Examiner acknowledges and Applicants agree that the "Mancini et al. and Thyagarajan et al. combination does not disclose determining whether a macro block at a same location in a preceding image frame has been split." On pages 13 and 14 of the Office Action, the Examiner contends that Pullen describes

> a macro block splitting determining unit (figure 2) that determines therewith whether to split the block by determining whether a block at a same location in a preceding image frame has been split ("find a block in previous buffer 30, a search corresponds to a block in current frame buffer 16" at col. 12, line 14; "process for level 1 begins by segmenting the level 0 domain in to a plurality of level 1 domain child blocks" at col. 18, line 4; "If the estimated cost is less than the distortion measurement, a level 1 range area is defined in the previous frame buffer for one of the domain child blocks and each range child block within that range is compared to the domain child block" at col. 18, line 30).

Applicants respectfully submit that Mancini, Thyagarajan, and Pullen, whether taken

alone or in combination with one another, fail to teach or suggest, among other things,

> a macro block splitting determining unit that sets a plurality of macro block splitting threshold values for splitting a macro block in an image frame into sub blocks and determines therewith whether to split the macro block by determining whether the macro block at a same location in a preceding image frame has been split

as presently recited in claim 27. In contrast, Pullen describes at col. 12, lines 14-16 that "[t]o find a block in previous frame buffer 30 which corresponds to a block in current frame buffer 16, a search must be performed" -- not a "macro block splitting determining unit" that "determines therewith whether to split the macro block" by "determining whether the macro block at a same location in a preceding image frame has been split." In other words, performing a "search" to "find a block in the previous frame buffer" that "corresponds" with a block in the "current frame buffer" is distinctly different from Applicants' "macro block splitting determining unit" that "determines therewith whether to split the macro block" by "determining whether the macro block at a same location in a preceding image frame has been split."

Pullen illustrates in FIG. 9 and describes in col. 18, lines 3-6 a "level 1" block search process for the "Y component" begins by "segmenting the level 0 domain block into a plurality of level 1 child domain blocks." Pullen describes at col. 18, lines 25-34 "determining whether a level 1 search is to be performed" by "comparing an estimated level 1 cost for a level 1 block to the distortion measurement for the level 0 block attributable to the level 1 block." Pullen describes that "[i]f the estimated cost is less than the distortion measurement, a level 1 range area is defined in the previous frame buffer for one of the domain child blocks" and "each range child block within that range area is compared to the domain child block." In other words, Pullen describes "segmenting the level 0 domain block into a plurality of level 1 child domain blocks," and "determining whether a level 1 search is to be performed" by "comparing an estimated level 1 cost for a level 1 block" to the "distortion measurement" for the "level 0 block attributable to the level 1 block" -- not a "macro block splitting determining unit" that "determines therewith whether to split the macro block" by "determining whether the macro block at a same location in a preceding image frame has been split."

Since Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another, fail to teach or suggest each of the features as recited in Applicants' claim 27, claim 27

is patentably distinguishable and deemed to be allowable.

Accordingly, withdrawal of this rejection and allowance of this claim are earnestly solicited.

Claims 28, 29, 36

With regard to claims 28, 29, and 36, it is requested that for at least the reasons that these claims depend from allowable independent claim 27, and therefore contain each of the features as recited in claim 27, claims 28, 29, and 36 are also patentable over Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another.

Accordingly, withdrawal of these rejections and allowance of these claims are earnestly solicited.

Claim 42

On page 16 of the Office Action, the Examiner acknowledges and Applicants agree that the "Mancini et al. and Thyagarajan et al. combination does not disclose determining whether a macro block at a same location in a preceding image frame has been split." The Examiner contends that Pullen describes

> a macro block splitting determining unit (figure 2) that determines therewith whether to split the macro block by determining whether a macro block at a same location in a preceding image frame has been split ("find a block in previous buffer 30, a search corresponds to a block in current frame buffer 16" at col. 12, line 14; "process for level 1 begins by segmenting the level 0 domain in to a plurality of level 1 domain child blocks" at col. 18, line 4; "If the estimated cost is less than the distortion measurement, a level 1 range area is defined in the previous frame buffer for one of the domain child blocks and each range child block within that range is compared to the domain child block" at col. 18, line 30).

Applicants respectfully submit that Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another, fail to teach or suggest, among other things,

> a macro block splitting determining unit that sets a plurality of macro block splitting threshold values for splitting a macro block in an image frame into sub blocks and determines whether to split the macro block by determining whether the macro block at a same location in a preceding image frame has been split

for at least the same reasons as discussed above in connection with claims 1 and 27.

On page 16 of the Office Action, the Examiner acknowledges and Applicants agree that the "Mancini et al. and Thyagarajan et al. combination does not disclose ... determining whether a sub block at a same location in a preceeding image frame has been split." The Examiner contends that Pullen describes

> a sub block splitting determining unit that determine whether to split each sub block by determining whether the sub block at a same location in the preceding image frame has been split ("distortion measurement between the domain child block and the range child block corresponding to the adjusted motion vector is compared to a second error threshold" at col. 5, line 55).

Applicants respectfully submit that Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another, fail to teach or suggest, among other things,

> a sub block splitting determining unit that sets a plurality of sub block splitting threshold values for splitting each sub block into smaller sub blocks and determines whether to split each sub block by determining whether the sub block at a same location in the preceding image frame has been split.

In contrast, Pullen describes at col. 5, lines 55-59 that "[b]efore a domain child block" is "processed for the U and V components," a "distortion measurement" between a "domain child block" and a "range child block corresponding to [an] adjusted motion vector" is "compared to a second error threshold." In other words, Pullen describes "compar[ing]" a "distortion measurement" to a "second error threshold" before processing a "domain child block" – not a "sub block splitting determining unit" that "determines whether to split each sub block" by "determining whether the sub block at a same location in the preceding image frame has been split."

Since Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another, fail to teach or suggest each of the features as recited in Applicants' claim 42, claim 42 is patentably distinguishable and deemed to be allowable.

Accordingly, withdrawal of this rejection and allowance of this claim are earnestly solicited.

Claims 45 and 48

With regard to claims 45 and 48, it is requested that for at least the reasons that these claims depend from allowable independent claim 42, and therefore contain each of the features as recited in claim 42, claims 45 and 48 are also patentable over Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another.

Accordingly, withdrawal of these rejections and allowance of these claims are earnestly solicited.

Claims 51 and 57

With regard to independent claim 51, on page 18 of the Office Action, the Examiner acknowledges and Applicants agree that the "Mancini et al. and Thyagarajan et al. combination does not disclose determining not to split the macro block if the macro block at a same location in a preceding image frame has not been split." On page 19 of the Office Action, the Examiner contends that Pullen describes

> determining not to split the macro block if the macro block at a same location in a preceding image frame has not been split ("find a block in previous buffer 30, a search corresponds to a block in current frame buffer 16" at col. 12, line 14; "process for level 1 begins by segmenting the level 0 domain in to a plurality of level 1 domain child blocks" at col. 18, line 4; "If the estimated cost is less than the distortion measurement, a level 1 range area is defined in the previous frame buffer for one of the domain child blocks and each range child block within that range is compared to the domain child block" at col. 18, line 30; if the estimated cost is more than the distortion measurement, then the level 1 search is not performed hence not splitting the level 0 block).

Applicants respectfully submit that Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another, fail to teach or suggest, among other things,

> splitting macro image blocks each of left-eye views and right eye views into sub image blocks according to quadtree disparity estimation using a plurality of splitting threshold values and determining not to split the macro block if the macro block at a same location in a preceding image frame has not been split with a macro block splitting determining unit

as presently recited in claim 51. In contrast, Pullen describes at col. 12, lines 14-16 that "[t]o find a block in previous frame buffer 30 which corresponds to a block in current frame buffer 16,

a search must be performed" – not "determining not to split the macro block if the macro block at a same location in a preceding image frame has not been split with a macro block splitting determining unit." In other words, performing a "search" to "find a block in the previous frame buffer" that "corresponds" with a block in the "current frame buffer" is distinctly different from" Applicants' "determining not to split the macro block" if the "macro block at a same location in a preceding image frame has not been split with a macro block splitting determining unit."

Pullen illustrates in FIG. 9 and describes in col. 18, lines 3-6 a "level 1" block search process for the "Y component" begins by "segmenting the level 0 domain block into a plurality of level 1 child domain blocks." Pullen describes at col. 18, lines 25-34 "determining whether a level 1 search is to be performed" by "comparing an estimated level 1 cost for a level 1 block to the distortion measurement for the level 0 block attributable to the level 1 block." Pullen describes that "[i]f the estimated cost is less than the distortion measurement, a level 1 range area is defined in the previous frame buffer for one of the domain child blocks" and "each range child block within that range area is compared to the domain child block." In other words, Pullen describes "segmenting the level 0 domain block into a plurality of level 1 child domain blocks," and "determining whether a level 1 search is to be performed" by "comparing an estimated level 1 cost for a level 1 block" to the "distortion measurement" for the "level 0 block attributable to the level 1 block" -- not "determining not to split the macro block if the macro block at a same location in a preceding image frame has not been split with a macro block splitting determining unit."

Since Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another, fail to teach or suggest each of the features as recited in Applicants' claim 51, claim 51 is patentably distinguishable and deemed to be allowable.

With regard to claim 57, it is requested that for at least the reason that this claim depends from allowable independent claim 51, and therefore contains each of the features as recited in claim 51, claim 57 is also patentable over Mancini, Thyagarajan, and Pullen, whether taken alone or in combination with one another.

Accordingly, withdrawal of these rejections and allowance of these claims are earnestly solicited.

Rejection under 35 USC §103

Claims 4, 6-9, 17, 18, 30, 32, 34, 35, 43, 44 and 53 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Mancini, Thyagarajan and Pullen as applied to claims 1 and 27 above, and further in view of U.S. Patent No. 5,208,673 to Boyce (hereinafter, "Boyce"). Applicants respectfully traverse these rejections for at least the following reasons.

With regard to claims 4 and 6-9, it is requested that for at least the reasons that these claims depend from allowable independent claim 1, and therefore contain each of the features as recited in claim 1, claims 4 and 6-9 are also patentable over Mancini, Thyagarajan, Pullen, and Boyce, whether taken alone or in combination with one another.

With regard to claims 17 and 18, it is requested that for at least the reasons that these claims depend from allowable independent claim 16, and therefore contain each of the features as recited in claim 16, claims 17 and 18 are also patentable over Mancini, Thyagarajan, Pullen, and Boyce, whether taken alone or in combination with one another.

With regard to claims 30, 32, 34, 35, it is requested that for at least the reasons that these claims depend from allowable independent claim 27, and therefore contain each of the features as recited in claim 27, claims 30, 32, 34, 35, are also patentable over Mancini, Thyagarajan, Pullen, and Boyce, whether taken alone or in combination with one another.

With regard to claims 43, 44, and 53, it is requested that for at least the reasons that these claims depend from allowable independent claim 42, and therefore contain each of the features as recited in claim 42, claims 43, 44, and 53 are also patentable over Mancini, Thyagarajan, Pullen, and Boyce, whether taken alone or in combination with one another.

Accordingly, withdrawal of these rejections and allowance of these claims are earnestly solicited.

Rejection under 35 USC §103

Claims 54 and 55 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the combination of Mancini, Thyagarajan and Pullen as applied to claim 42 above, and

further in view of common knowledge in the art. Applicants respectfully traverse these rejections for at least the following reasons.

With regard to claims 54 and 55, it is requested that for at least the reasons that these claims depend from allowable independent claim 42, and therefore contain each of the features as recited in claim 42, claims 54 and 55 are also patentable over Mancini, Thyagarajan, Pullen, and common knowledge in the art, whether taken alone or in combination with one another.

Accordingly, withdrawal of these rejections and allowance of these claims is earnestly solicited.

Conclusion

It is respectfully submitted that a full and complete response has been made to the outstanding Office Action and, as such, there being no other objections or rejections, this application is in condition for allowance, and a notice to this effect is earnestly solicited.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided below.

If any further fees are required in connection with the filing of this amendment, please charge the same to our Deposit Account No. 502827.

Respectfully submitted,

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Dated: March 10, 2009

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